

# ITEMS OF INTEREST.

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No. 2.

## *Shots from the Profession.*

### PROCEEDINGS OF PENNSYLVANIA SOCIETY.

[Reported by DR. WM. H. TRUEMAN, for the ITEMS.]

Dr. S. B. Luckie, of Chester, read a paper entitled

#### CAVITY LINING.

The operation of lining a cavity consists in covering the walls with a layer of some material that will subserve a purpose not expected of the filling. Fillings of gold and of amalgam are more durable than those made of the cements, yet the latter will often preserve a tooth even after a large portion of the filling has been dissolved, or worn away by mechanical forces. The deduction then is, that the cements, though more easily destroyed by the destructive agents that come in contact with them, are better tooth conservators than the metals, and that more promising results might be obtained by the conjoined use of both in the same cavity.

Large and deep cavities may be partially filled with one of the zinc cements, a metallic filling being placed over and well anchored into it. In this way, the effects of thermal shock may be modified, frail walls supported, discoloring of tooth substance prevented, and the objectionable showing of fillings through transparent walls avoided. In selecting a cavity lining, their respective properties should be considered, otherwise the object desired may be defeated. Oxychloride of zinc, from its stimulating properties; is desirable for lining teeth of poor structure containing vital pulps. Its stimulating activity in the nutritive currents, will produce an excess of the pabulum which nourishes and organizes dentine; on the other hand if used to excess, or without a protection to guard its initiatory effects on the pulp, the result will be congestion and the death of that organ. The class of teeth in which the danger from chloride of zinc is greatest are those denominated soft, low grade, poor structure, etc.; it is in these, also, that its exciting qualities should be most effective for good.

That the stimulating effect may be held in check, exposed or nearly exposed pulps should be protected by some form of cap; a concave disk of tin, readily made at the time it is to be used, answers very well for this purpose, with the concavity filled with a paste of oxide of zinc and oil of cloves or creasote it is carefully placed in position, and not only protects the pulp from pressure, but modifies to a great extent the physiological action of the cement. Where the cavity does not approach the pulp the disk may be omitted, the paste of zinc oxide and creasote being sufficient protection.

Where the object is simply to prevent a filling showing through thin walls and the tooth is of a markedly positive color, the cement may be shaded with a suitable pigment, so as to more nearly harmonize with it.

Phosphate of zinc, possesses attributes that make it a better lining from a mechanical stand point, than the oxychloride; its ductibility allows it to be placed against frail walls with a burnisher instead of cotton pellets, leaving a smooth surface; it is non-shrinking, hardens quickly, and has greater edge strength. It can also be used with safety in teeth with vital pulps; he deemed it important, however, that a protecting layer of some material be placed between it and the pulp in all deep cavities, for though the phosphoric acid may not interfere with the nutrition of the pulp, the pressure necessary for its adaptation might be sufficient to cause congestion.

The advantages of lining cavities with the cements named are, briefly stated, less liability of recurrence of decay, color of tooth sustained when amalgam is used, discolored teeth improved in color, thermal shock modified, and liability to fracture reduced.

In cases where the cements are undesirable, thick sandarach varnish, or gutta-percha dissolved in chloroform have been recommended and will often prove an excellent lining.

Dr. Magill, doubted whether chloride of zinc, when combined with the oxide as it is in the oxy-chloride of zinc cement, possesses the therapeutic value suggested by the essayist. The mechanical protection it affords can be secured equally well with a far less irritating cement; this being the case what is gained, if all the decay is removed from the cavity, by using the chloride of zinc to counterbalance the risk of its causing serious irritation. If we could accurately diagnose the condition of the pulp, we might in some cases derive benefit from its use, but this we cannot well do. The great advantage of cavity lining, to his mind, is the economy of more expensive material, the saving of time and effort to the operator, and of time, money, and pain, to the patient,

Dr. R. B. Cummis, of Blairsville, read a paper entitled

#### A STUDY IN DENTISTRY.

He considered the subject from the standpoint of a country dentist.

and deplored that his isolated position deprived him of that spur to put forth his best efforts which the competition and association of a large community develops in his city brother. Frequently it causes the rural practitioner to fall into ruts, and to conduct his business by routine methods. He then referred to the importance of keeping the instrument case and the instruments clean and in good order, the importance of instructing patients in the proper use of tooth powder and the tooth brush, etc.

Dr. Magill, referring to the remark in the paper about country dentists falling into ruts, said, the question with him was whether we do not all of us fall into ruts. The tendency seems to be to get down to the level of our surroundings. He knew many dentists living in little country towns who had kept well up with the times, they have resisted the temptation to step down to the level of those around them, their ambition has led them to strive to work up. They make excellent fillings, pride themselves on contour work, use the electric mallet, skilfully insert crowns, and by close attention to business and a thorough devotion to their profession have built up an excellent and appreciative practice. They have gathered around them patients who appreciate good work and are willing to pay as good prices for it as the city patient.

Dr. W. E. Van Orsdel, of Sharon, read a paper on

#### ALL SORTS OF QUESTIONS.

He said his field for practice is in a district full of malaria, where quinine is an article of regular diet. I have had numerous instances, where after the insertion of small fillings, in teeth where no after trouble need be expected, an attack of malaria seemed to be the cause of very decided trouble; in some cases periostitis, in others death of the pulp and alveolar abscess. Can anything be done to avoid such results? My experience in capping pulps has for the same reason been decidedly unsatisfactory, and seems to be but the sure precursor of death. He related the case of a patient whose teeth, originally strong, were being rapidly destroyed, owing he thought, to the free and constant use of candy. He was a manufacturer of candy, and ate probably a pound a day. He asked what could be done to stop their rapid decay. He had advised the local application of prepared chalk. Is there anything better?

Dr. Beck stated that in cases where from long continued use the system had become so saturated with quinine that it seemed to have lost its effect, he had had excellent results from the cautious use of arsenic, in the form of Fowler's solution.

After the transaction of routine business, the newly elected President, Dr. E. P. Kremer was conducted to the chair. He appointed the following committees:

*Executive Committee*.—C. S. Beck, Chairman, Wilkesbarre; J. C. M. Hamilton, Secretary, Tyrone; G. W. Klump, W. H. Trueman, S. H. Guilford.

*Publication Committee*.—W. H. Trueman, Chairman, Philadelphia; S. H. Guilford, Secretary, Philadelphia; E. T. Darby, Alonzo Boice, J. R. C. Ward, W. B. Miller, J. C. M. Hamilton.

*Committee on Enforcement of Dental Law*.—W. E. Magill, J. W. Rhone, J. C. Green.

*Committee on Legislative Action*.—C. N. Pierce, G. W. Klump, W. E. Magill, H. Gerhart, J. P. Thompson.

Adjourned to meet at Glen Summit on the last Tuesday in July, 1887.

## AN INTERNATIONAL DENTAL CONGRESS.

REPORTED BY A. E. BALDWIN, M.D., D.D.S.

At the close of the last meeting of the Chicago Dental Society (Dec. 7th), and after a motion had been made to adjourn, and many of the members had left, Dr. T. W. Brophy offered a resolution endorsing the preamble and resolutions passed by the First District Dental Society, of the State of New York, in regard to the organization of an International Dental Congress, to be held in this Country, and asked that a committee of three be appointed to confer with the Committee of the First District Society.

The following is a report of the discussion on the resolutions:

DR. ALLPORT.—To the holding of an International Dental Congress, at a suitable time and place, and under favorable circumstances, no valid objections can be raised. While, therefore, I can approve of, and will vote to endorse, so much of the resolutions as call for the organization of the proposed Congress, I cannot endorse some portions of the preamble, nor certain conclusions stated in the resolutions just read, for they seem to me to be rather presumptuous.

The third clause of the preamble reads (reading from the *Independent Practitioner*), "Whereas, Dentists throughout the world look to their professional confreres in America for the further advancement of dental science; "Resolved therefore," says a portion of the first resolution, "That immediate steps be taken looking to the formation of an International Dental Congress, to be held in this country at as early a date as arrangements can be made which will make such a Congress a credit to the dental profession in America." Without venturing to justify the modesty of the claim in the preamble, or even to criticise it, I will suggest that, as the diplomas of few of our dental colleges are recognized in most of the leading European countries as an evidence of qualifications to practice in those countries, this claim is hardly

borne out by the facts. While the dentists of this country may excel in handicraft—manipulative skill—our “science” hardly outranks that of the educated dentists of England or some of the other European countries. I would much prefer, therefore, that the clauses to which I have made reference, should be left out.

While I can see no objection to an International Dental Congress, I can see no need for great haste, nor can I see that the claim set forth in the preamble is sufficiently true to justify the First District Dental Society of New York, or the practitioners of this country, in demanding that the Congress shall be held in America, if held at all. There need be no hurry in this project. To push the matter with undue haste, would imply, or seem to imply, that the leading spirit in the undertaking had some ulterior or selfish motive at heart. There is now but a few months before the meeting of the International Medical Congress, and the work of the Section of Dental and Oral Surgery in it is important.

If it is desirable to organize an International Dental Congress, it seems to me it would be better to wait till the meetings of the American Dental Association and of the International Medical Congress in this country next summer to perfect the plan. Then when representative dentists are assembled, from all the countries of the world, they could confer and determine what shall be done, when it shall be held, and, if held, whether it shall be in this country or some other; rather than to start out with the claim that the dental world is looking to this country for the future advancement of dental science, and that, therefore, whether the Congress must be held in this country, if held at all.

This, or something similar, it seems to me, would not only be the right, but the judicious thing to do, if we would make such a Congress the success it should be. To hold a Congress too soon, if it did not to some extent injure the section, it would certainly militate greatly against its own success.

DR. BROPHY.—I protest against such remarks as we have just listened to. They are an insult to the profession. It is acknowledged the world over, that American dentistry is the best in the world, and the American dentists stand at the head of the profession, and to say that it is presumptuous to claim what all know to be true, is an insult to American dentists, who have done so much to elevate the profession. We do stand at the head of the profession, and I object to having it said that such men as Drs. Dwinelle, Perry, Northrup and others are selfish and have ulterior ends to accomplish in having this Congress. That committee is composed of the best men in New York, known and respected by everybody in the profession, and I object to its being said that they are selfish in what they have done. The statement that the

diplomas of the dental colleges of this country are not received in Europe does not amount to anything for their diplomas are not received here. It is a mere retaliation.

DR. ALLPORT.—I am always glad to hear the good name of American dentistry defended, but to claim that the entire dental world is looking to us for the future advancement of dental science is a little presumptuous, and in bad taste, even though it might be true. The fact that the diplomas of some of our Dental Colleges are received in Europe while those of others are not, is sufficient evidence that refusal is not retaliatory.

While I shall vote for the congress, I would like to eliminate the clauses I have referred to; for, as I have already said, the recognized dentists of many of the countries of Europe are fully as "scientific" as are the dentists of this country.

In my remarks when on my feet before, I said nothing about Drs. Dwinelle or Perry, or anybody else, as one would infer from what Dr. Brophy has just said. I said the leading spirit, or spirits, if you please, and I happen to know that the gentlemen named are not the leading spirits in this movement, and I also know who they are; therefore I do not wonder that the gentleman is a little sensitive on the point.

The leading spirits are some of those who schemed to get control of the Section in the International Medical Congress, but failed. They were months laying their plans, and they did their best to get certain gentlemen appointed to office, and even after the appointment of the leading officers had been made, they tried in a questionable way to get them changed. Failing in their efforts they came to the conclusion that we did not want the Section. The seemingly spontaneous action of the meeting referred to in New York, is but the result of months of hard labor on the part of some of these same gentlemen.

In regard to the gentlemen placed on the committee, I will say that I know every one of them, and some I believe to be conservative, judicious, and level-headed men; and I believe Pres. Carr, in his wisdom, placed them on the committee to keep it straight.

Hoping that wise counsel will prevail, and that harmonious action will be secured so that if the Congress is held, whether in America or in Europe, it may be a grand success, I will vote for the resolution.

DR. HARLAN.—I would suggest that the committee be increased to ten.

DR. ALLPORT.—Yes, make it ten.

This being agreed to, it was passed unanimously, twenty to twenty-five members being present.

## CAUTION IN GIVING ANESTHETICS.

DR. L. W. BRISTOL, LOCKPORT, N. Y.

It is now about fifteen years since I refused to administer an anesthetic to any person unless there was a third person present, and my reason for it was this: There came to my office a lady with her daughter about seventeen or eighteen years of age. She wanted the right lower molar extracted and desired chloroform. She was seated in my chair; I prepared the napkin, poured on the chloroform and handed the bottle to her mother, telling her to place her thumb over the mouth, and if I held out the napkin to pour on a little. It was not necessary to apply more. The young lady took it kindly, and was soon under its influence. I extracted the tooth, and after a short time she came out from its influence. I asked her how she felt. She snapped out, "Don't speak to me." Her mother said, "Why do you answer the doctor so roughly?" She replied, "I did not come here to be insulted." Her mother asked her who had insulted her. She said I had; that I had hugged her and kissed her, and taken improper liberties with her. Her mother assured her that she stood right beside her every instant, and nothing of the kind had occurred. She insisted that her charge was true. I advised the mother to take her to the next room and let her lie on the lounge, and she did so. On the wall over the lounge hung a map of the village of Lockport, and on the right lower corner were the words, "Drawn by E. C. Callen, civil engineer." She caught sight of that and began to scream and cry. "There, it is drawn by Callen. I did not want it drawn by him; I wanted Bristol to draw it, and now I have been insulted and ruined." Her mother quieted her after a short time, and asked me if patients often got such whims in their heads. I told her they had all kinds of hallucinations, but in my practice I had never met with so marked a case. "Suppose," said I, "that the young lady had come here alone and gone home and told this story; what would you have thought?" She replied, "I should certainly have believed her."

I remember the case of poor Dr. Beal, of Philadelphia, who was tried, convicted and sentenced to State prison on a case precisely like this, save that I had a witness—her mother—in my favor; otherwise I might have been obliged to wear the striped clothes and look through the prison bars at Auburn. I wish to impress most emphatically on the younger members of the profession the importance of having a third person present when giving an anesthetic, especially to a female patient. That mother has long since gone to her grave. The daughter married, and has three children. A short time since a friend of mine, in the course of conversation, alluded to the incident, when she replied: "If it had not been for mother I always should have

thought and would have taken my bible oath that I was assaulted and ill-used at that time, and I have still the same impression "

It is now about five years since I utterly refused to administer anesthetics and operate. I say to those applying, "Bring your doctor or call in one; there are plenty of them; let them administer it and I will operate." My reason is this:

A young lady accompanied by her brother came to have two teeth extracted, and wanted chloroform. I administered it, and extracted the teeth. She took it kindly, and came out from its influence all right, perfectly satisfied, paid her bill, and left for home. On the way the horse took fright at the cars, ran away, tipped them out in the gutter, and the lady was taken insensible to a farm house near by. They saw bloody saliva oozing from her mouth, and thought she was injured internally, but she finally recovered consciousness and told them the blood came from her mouth, for I had extracted two teeth for her. This relieved their anxiety, and they took her home. The next day one of the family to whose house she had been taken came in and told me of the accident, and said she was badly hurt. I heard nothing more for two months. In passing up the street one morning I met a lawyer, who said he wanted to see me in his office. I accompanied him, when he asked me if I remembered, two months before, giving chloroform to Miss —, and extracting two teeth? I told him I did. "Well," said he, "she and her neighbors say she has not seen a well day since. They want me to commence a suit for damages. Cannot you and I come to a settlement without a law-suit?"

I replied, "In this case we cannot. She was not injured by chloroform. Did they not tell you that in going home from my office the horse was frightened at the cars, ran away, tipped her out in the gutter, and that she was carried in an insensible condition to a farm house, and it was a long time before they could bring her out of that condition?" "No," said he "that is all news to me, and if it is true, we cannot make out a case." In a few days the young lady and her friends visited his office, ready to make the affidavit in a suit against me. He asked them if they had a runaway on the road home from my office, and if the young lady was pitched into the gutter and carried to a neighboring house insensible. They admitted the fact, but wanted to know what that had to do with her taking chloroform and not seeing a well day after it. He told them that if he commenced a suit against me, I could show that the injury and shock to her nervous system was what caused her illness, and that I would beat them, and they have to pay the cost of suit. He declined, under the circumstances, to bring suit, and I never heard any more of the matter. We owe it to ourselves and the profession that we keep our reputation good.—*Ind Practitioner.*



## MINERAL TEETH—NEEDED IMPROVEMENTS.

Read at the American Dental Association.

DR. L. P. HASKELL, CHICAGO.

A serious annoyance in Prosthetic Dentistry is the difficulty of securing teeth natural in color, as well as shape.

Having been familiar with the manufacture of mineral teeth for forty-one years, the first twelve of which I spent in carving block teeth for my own practice and also for the profession, I am able to speak advisedly.

When I commenced the study of dentistry, Alcock and Stockton, both in Philadelphia, were the only manufacturers of mineral teeth. Soon after S. S. White, an employé in his uncle's factory (Samuel W. Stockton), started a new establishment, under the firm name of Jones, White & McCurdy. Mr. White took charge of the manufacturing, and there was at once a great improvement in molds and color. Some of the most perfect shades were produced, the teeth being clear and natural in appearance. In the course of time the material became more *opaque*, and as a necessary result, the colors were not as satisfactory. What was this? Because in the attempt to secure a *stronger* material, more silax and clay, or less feldspar, were used, and so there was less translucency, less of natural appearance.

The next manufacturers in the field were, I think, the firm of Orum & Armstrong, with H. D. Justi, first as manager, later sole proprietor. The results of his personal efforts in coloring and shape were eminently satisfactory, but as in the case of S. S. White's teeth, they gradually became more opaque, and lost, in a measure, the life-like coloring, so that now in attempting to find a set of plain teeth, after ransacking two or three dental stocks, I am often compelled to make use of what does not suit me, and in matching partial cases, I am sadly perplexed.

Every dealer, so far as I have seen, is carrying a larger stock of teeth than necessary. I do not know of a stock out of which a large proportion ought not to be broken up, and the pins put into a fresh stock; for in selecting teeth we are compelled to go through this culled out stock, the remains largely, perhaps, of a quarter century of business.

I do not know of a stock of teeth which might not be reduced a third, if the remainder were made of more generally medium sizes and colors which are often required in matching the natural organs. Miscellaneous bicuspid and molars (and in fact these teeth in full sets) should never be white, but darker in shades than the anterior teeth.

Fifteen years ago, from a small stock of *gum-plate* teeth contained in three drawers, I could select, in fifteen minutes, a perfect match for partial sets; to-day, from a much larger stock, in the same establishment, I cannot find what I need, nor can I elsewhere.

There are certain colors in teeth which are needed far more often than others, and yet are the most difficult to secure. For instance, among the yellow, which all teeth variably possess, the brownish yellow is only sometimes needed, while the straw or lemon colors, in their various shades, so common in the natural teeth, are found. This is being remedied, and the failure now is mainly in the blue and gray shades, and in the blending of these with the yellow, and yet these combinations were successfully produced formerly by our leading manufacturers.

I recognize the fact that one of the most important of the materials used in teeth, feldspar, varies in quality, tending to make the porcelain opaque or milky, but I am of the opinion that the main difficulty lies in the attempt to secure a strength which is uncalled for.

For *bony* appearance of texture, life-like coloring, in fact nearness to nature, Ash's teeth are unexcelled, and yet they use the American feldspar. But to secure these desirable results, the formula for the material is such that they are fused at so much lower a temperature than the American teeth that they cannot be used for continuous-gum work. While these are not as strong as the American teeth, they are strong enough, dense and hard to grind, and stand the "blow-pipe test" admirably. Then again, in the low fusing materials, coloring-matters can be used which cannot in the higher fusing, on account of their bleaching, as for instance, cobalt.

I see no reason why our own manufacturers may not use a lower fusing material even in continuous-gum teeth, and so attain more satisfactory results in coloring.

The next point for consideration is the need of *alteration* in shapes of many teeth, and also to some extent the arrangement of the pins. There is too great a tendency to multiply molds, not because the manufacturers desire it, but because they think the profession require it, whereas such a demand is only on the part of a few cranks, with some crochety notions to carry out. I think the molds could safely be reduced one-fifth. Many of the small molds should be left out; for they are of sizes that no dentist with any regard for his reputation should use. There are some uncouth sizes, "*horse teeth*," that are utterly unfit for any human mouth. If a patient's natural teeth were as large, it would be a mercy to remove and replace them with something more presentable.

In continuous-gum teeth it is easy to modify shapes (teeth of course which are not porous and whose enamel fuses slightly at the baking of the continuous-gum body), narrowing, flattening, lengthening at the neck by adding on the continuous-gum body, which I am constantly doing.

In gum-plate teeth, now the day has passed for mounting full sets,

backed and soldered, they are only needed for partial sets. Therefore, the gums should be short,—that is, extending but a short distance below the neck of the tooth,—so as to match the needed natural gums. This is especially true of bicuspid and molars.

Too large a proportion of plate teeth, both gum and plain, have “cross” pins. These should be used only when absolutely necessary, as the perpendicular position of pins is stronger.

In rubber teeth there are many moulds where the pins, even in long teeth, are placed near the cutting edge of the tooth, making a short shoulder and a thickening at the edge that is unnatural and interferes with speech. There is no necessity for this.

On most of the rubber teeth there is a flange around the neck. A case cannot be waxed up so as to shape the rubber gum properly with this flange on the tooth. I am always compelled to grind it off.

In bicuspid and molars the grinding surfaces in a majority of molds are not broad enough, often ridiculously thin as well as narrow. It were better, for the usefulness of these teeth, if there were less difference in length of the outer and inner cusps, especially avoiding the overhanging outer cusps, as they interfere with the lateral motion of the jaws by displacing the plate.

There is not sufficient attention paid to the relative size of the six anterior and the posterior teeth, length and width often being out of all proportion.

Teeth are often overbaked, the effect of which is to destroy the outlines, giving a glassy look, and injuring color.

One of the merits of Ash's teeth is their density. Any portion of the enamel or body may be ground and not leave a dirty surface, or one that soon becomes so. Teeth that will admit of this do not require so large a variety of molds.

I know we are often met with the assertion that teeth as they are furnished are sold as fast as they are made, but that is no reason why as perfect a thing as possible should not be made, thereby educating those who are careless to a higher standard. Let our tooth manufacturers become educators.

What we want is not cheaper but better teeth, and if necessary to accomplish this let manufacturers charge more for them.

I have made no invidious distinctions between manufacturers, for they all have their merits, and most assuredly all have their demerits. This subject is important, and I trust it will receive the attention it so much demands. It is a singular fact that while the sale of American teeth is great abroad, in England as elsewhere, there is a rapidly increasing demand for English teeth here. This fact alone should stimulate our own manufacturers to improvement.

## WARRANTED.

DR. L. W. BRISTOL, LOCKPORT, N. Y.

Read before a Union Meeting of the 5th, 6th, 7th and 8th District Dental Societies, of New York.

That word has been the cause of a great deal of trouble and misunderstanding in the profession. Twenty years ago at the bottom of every dentist's card it might be found, and in a great majority of cases the word "permanent" was added. One now scarcely can imagine how any dentist with half a grain of common sense could fail to see the absurdity of such an announcement. Yet it was the common practice in those days. We then met—as we do now—a great many unreasonable people. I will give you some instance of how "warranted permanent" has served me in my practice:

I had made a partial denture on gold plate for a Mrs. S. The plate was well made and a good fit; so much so that three weeks after she said, "I like my teeth very much. If you always give as good work, I think your patients can find no fault." About two weeks after, two young ladies called on me and asked if Mrs. S. had been to see me. They were school-girls, and their school room adjoined the room of Mrs. S. They said she had a tea cup and brush and was cleaning her teeth. She left them in a chair and went to put away the cup and brush, when one of the girls entered, took hold of the chair, and not seeing the teeth tipped them on the floor, and another girl stepped on them and bent them. Mrs. S. was very angry and loudly lamented her loss. The next day the old lady came to my office. She said, "Just look at my teeth, they don't fit at all, and they never did." I replied, "Why, Mrs. S., you told me last week they were a perfect fit and were satisfactory; they look as though they had been stepped on." She replied, "No, I never told you they were a good fit; they have not been stepped on, and you lie if you say so." She was a zealous church member, but I handed her back the teeth, opened the door, told her to get some other dentist to do her work, for I utterly refused to do anything more for her. She replied, "You warranted them permanent, and I will sue you." I pointed to the door and told her to sue when she pleased.

I heard nothing from her for nearly a year and half, when one morning a message came to me that Mrs. S. wanted to see me immediately. I had heard that she was very ill with an incurable disease. I called on her, and found her on her dying bed. She held out her hand and said she wanted to ask my forgiveness for having accused me of lying, when she was the one who lied. She had asked God to forgive her, and He had done so, and now she wanted my forgiveness.

I told her if God had forgiven her I could not do less, and gave her my hand, and left. In about two weeks she died.

I will relate another rather extraordinary case in my practice. I had made a case of teeth on gold plate for a Mr. H. They were well made and a good fit, and he was well pleased, and paid for them. About one week after, he came up behind a large, strong, athletic man and seized him around the body. The man turned suddenly and his elbow struck H. a powerful blow full in the mouth, knocking out his false teeth and loosening the teeth to which they were attached. He came to me and said, "You are not going to charge me for repairing them, are you?" I replied, "Yes; I did not warrant them against such accidents." He insisted that I should make them good, free of charge.

A day or two after I met his attorney, who said, "I am going to bring suit against you for not repairing the teeth of Mr. H." We argued the case, but he insisted that I had warranted them permanent; that it was a good accidental policy, and he would make me fix them without charge. The prospect looked fair for a law-suit and a jury trial. The lawyer was an eloquent man, a good, smooth talker. I thought I was beaten already, and I made them over. H. wore them about three weeks, when one day while leading his horse, which had a habit of throwing his head around, he was struck in the mouth, and his teeth again knocked out, breaking some of them. Here was another "warranted permanent" complication. I compromised and made them over, and got them satisfactory. In a little over four months there was a great squirrel hunt, and H. was one of the party. They had a big day of it, got back to a country tavern and imbibed rather freely, when one of the party, who was pretty full of fire-water, in fun thrust the butt of his gun at H. Being a little too much intoxicated to judge of the distance, he hit him a full blow in the mouth, split open his lip, made havoc with his teeth, and "warranted permanent" came home to roost again. I made them over, adding two more teeth; in fact, made a new job of it, made out his bill, adding the words "*Not* warranted for ten minutes," told him to show his lawyer the bill and receipt, and that if another accident happened to his teeth I would nail a horse-shoe over his mouth for luck. Shortly after he removed to Kansas; I never heard of him again. That attorney is not practicing in Lockport now. He has passed away, and has probably been called upon to plead in a higher court. If he escaped a verdict of guilty, I can only say that he must have pleaded earnestly.—*Ind. Prac.*

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"Think for yourself" is the motto,—be self-reliant or you will fall short of real manhood.

## SOME OF THE CONSTANT CAUSES OF THE FAILURE OF FILLINGS.

DR. GEO. H. CUSHING, CHICAGO.

The first cause to which I would call your attention is the improper or imperfect preparation of cavities. It is safe to assume that a large proportion of cavities are not as thoroughly prepared as they should be, and as many of them could be. As a rule, cavities are not sufficiently enlarged at their margins to entirely remove, not only that which is completely disintegrated, but that which is partially so. This may occur where cavities are so situated as to be reasonably well examined by the eye, but it is very apt to where the cavities cannot be thoroughly examined in that way. Even those cases, or many of them at least, which appear to the eye to be perfectly prepared would, if they could be examined out of the mouth with a microscope, present unmistakable evidence of minute points of imperfection which soon or late would prove destructive. The only remedy for this cause is to be found in a greater thoroughness in our practice, that is, by cutting away much beyond the line that may appear to us to be perfectly sound; for there is doubtless an infected zone around the margins of most cavities that perhaps the strongest lens applicable to this position would fail to reveal, which is in the earliest stage of disintegration, and would under favorable conditions rapidly break down. I think a more general use of the lens for critical examinations of the margins would materially reduce failures from this cause. Again, cavities may be perfectly prepared as regards the removal of all diseased or even infected territory, and yet by our having left weak or thin walls of enamel overlapping, the fillings will be in constant danger of failure by the breaking down of these frail points. The remedy for this is not to leave any such weak points; *cut* them away, so that they cannot *break* away.

Another cause, specially as regards proximal cavities, is the failure to perfectly adapt the gold to the margins of the cavities, particularly the cervical margins. To obviate this cause of failure, the use of non-cohesive gold at the cervical margins, with a more thorough and careful manipulation at such points, should be practiced. It is not claimed that cohesive gold *cannot* be as perfectly adapted to the margins as non-cohesive, but that the majority of operators would be more successful in the use of the latter.

Over-malleting on the margins is probably the cause of more mischief than is generally suspected. The edges of enamel, however well prepared, cannot withstand more than a certain force of impact, and we cannot determine with accuracy just how much they are able to sustain. Hence we should exercise the greatest care, and be sure to err on the right side. This tendency to extreme malleting is very strong, and the fact that much more gentle force than is generally used would

be equally if not more effective is apparently not appreciated. To correct this error would probably be more difficult than might at first appear, from the fact that we cannot easily change our judgment as to the amount of force proper to be used, after a long established habit which we have felt was justified, and also because of the difficulty of judging what amount of force it would be proper to apply. The safest method, doubtless, would be to use hand pressure over the margins till they are covered with a sufficient bed of gold to enable them to bear the mallet force.

The next cause I shall mention may be found in the improper shaping of the proximal surfaces of teeth where separations are made, either by cutting, grinding, or wedging. In all such cases, where it is at all practicable to do so, the surfaces should be so shaped that in the event of the teeth approximating closely, the gold should come in contact rather than the teeth, and that toward the grinding end of the tooth, so that a free space may be left at the necks of the teeth. In that class of teeth which naturally present large plane surfaces on their proximal sides, they should be cut away on their buccal and palatal aspects, and so filled as to present the same kind of surfaces as above described. Were such teeth wedged apart and filled, and permitted to retain their natural shapes, the chances of failure on their coming together would be much greater than if shaped as indicated above. This is one of the cases in which to retain or to attempt to perfectly restore the natural contour would be to invite disaster.

Finally, one of the great causes of failure is in the attempt to do in an hour that which requires two hours for its proper performance. There is probably no fault so prevalent among dentists as this, and it stamps failure on many operations that, if given ample time, would not fail. Hasty, slipshod operations bring reproach on the profession, destroy the confidence of the patient and the reputation of him who performs them. The only influence that can remedy this evil must come from a higher appreciation of our duty as professional men, and a more conscientious performance of that duty.—*Ill. Trans.*

The annual production of coca leaves in Bolivia amounts to 7,500,000 lbs., of which Bolivia consumes 55 per cent., the United States and Europe, 5 per cent., and the rest is consumed in other parts of South America. What a small proportion is devoted to legitimate scientific and medical purposes!

Japan publishes and supports seven medical periodicals, nine on sanitation, two on pharmacy, while seven others are devoted to various branches of science. We hope it may not be long before a dental one will appear.

## WHAT IS EXPECTED OF US?

DR. GEO. H. CUSHINGS, CHICAGO.

It has come to be understood that the teeth are essentially parts of the living organism, connected through the great sympathetic system of nerves with every other part of the body; that diseased conditions of the teeth may cause serious disturbance of organs and parts the most remote, and that remote parts may, through diseased conditions, affect the teeth. It has also been learned that the teeth themselves are subject to various diseases independent of caries, all of which are amenable to treatment.

In the days when operative dentistry was regarded as simply a mechanical craft the medicaments used by the practitioner consisted almost solely of two articles, creosote and opium in some of its forms, which were used simply to relieve toothache. To day there are not less than twenty or thirty remedies which the intelligent dentist regards as essential in the local treatment of various conditions, without referring to the many constitutional ones that are frequently indicated, all of which are efficient in aiding nature to effect cures of the various ailments to which the teeth and adjacent parts are subject.

There are many diseases located in the teeth alone, while of the adjacent tissues may be mentioned as some of the more frequent, hypertrophy, inflammation and recession of the gums, pericementitis, pyorrhea alveolaris, alveolar abscess, various affections of the antrum, and necrosis of the alveolar process; and it is continually necessary in treating the teeth to relieve diseased conditions in other parts of the body, especially in the eye and the ear. All these diseased conditions, presenting great variety in their characteristics, it is expected that the dentist of to-day will be fully competent to treat, and patients are placed in his hands with the confidence that he is thus competent. Beyond the conditions above enumerated, certain surgical operations and treatment properly lie in his province, such as the setting of broken and dislocated jaws, the removal of certain necrosed parts and of certain tumors of the gums, and the general practitioner of dentistry should be competent to deal with such cases.

Now, what qualifications are necessary for the performance of these duties? For the intelligent performance of the mechanical operation of the filling of teeth alone a man needs to understand the laws of physics and mechanics, and to be trained to a keenness and nicety of observation and a delicacy and skill in manipulation not required in any other pursuit. But before a man can be justified in attempting these mere mechanical operations, however skilful a manipulator he may be, he must be competent to decide when it is proper to perform them, or what preliminary treatment is required. This necessitates a



knowledge of the relation of the teeth to the general system, of the various sympathetic symptoms which diseased teeth may give rise to, or, on the other hand, that may appear in the teeth when originating in diseased conditions of remote parts, and also an acquaintance with the action of the various remedies it may be necessary to employ. This knowledge can only be obtained by the study of the nervous system and of therapeutics.

When we get beyond the mere mechanical operations and the judgment which should determine their performance, and come to treat diseased conditions besides simple caries, we enter the domain of physiological activities, and must be familiar with the laws governing these, as well as with those determining their various aberrations, causing what are termed pathological conditions. Here, again, we must be familiar with the more numerous remedial agents we may have occasion to use, their mode of action, their possible dangerous properties, and their value as aids to nature in her efforts at restoration to health. Only the study of therapeutics and materia medica can qualify us in this field of practice. When we come to the treatment of abscess, the setting of broken or dislocated jaws, the treatment of necrosis, the removal of tumors, or the exploration of the antrum, we must have added to all the qualifications heretofore enumerated a thorough knowledge of the anatomy of the parts we are to operate on, as well as the principles of surgery.

These propositions cannot be disputed. Therefore is it too much to insist that young men entering on the practice of operative dentistry should so qualify themselves as not to bring reproach on the profession of their choice, and that they should realize that when they have technically completed their education—that is, the course of study required by the schools—they have only just laid the foundation of their education, and that the superstructure can only be carried to completion by the closest and most constant study through life?

When those seeking to enter the ranks of the dental profession come fully to realize this, then we may hope for a progress in the true professional sense such as the past has not yet witnessed. The signs of the time are propitious to this end. The public mind is being educated and demands a proper qualification of its professional men; the schools recognize the importance of a more thorough training of their pupils, and are continually advancing their standard, while the young men entering on such study are more generally, though in a dim way, realizing the importance of the suggestions here so briefly presented. We may, then, hope that the next decade shall develop a class of professional men who will bring credit and honor to our ranks, and whose ministrations shall have a greater beneficence in proportion as their qualifications and earnestness are greater.—*Ills. Trans.*

## HOW LONG TO BECOME A DENTIST?

G. CHISHOLM, D.D.S.

"How long will it take me to become a dentist?" is so often asked by young men beginning or wishing to begin the study of dentistry, that a few words on the subject would not be amiss. The requisites, however, are the things of importance—the time, immaterial.

I remember hearing of a young man who said to his father, "I am undecided, father, whether to study theology or law." The father replied, "My son, study law, by all means; but do not study law unless you can put your heart and mind into it." Many engaged in the professions are looking only after the remunerative part of their work? If this were not true, the terms, "quack," and "charlatan," would never have had such significant meaning. To become a true dentist, requires labor, energy, zeal, skill, fidelity. To become a "so-called" dentist, requires an outfit of instruments, an acquaintance with a few technical terms, a good amount of brass, a small package of amalgam, and a display of artificial teeth.

Dentistry exhibits an extraordinary rapid growth. A young man entering the profession to-day rides high and dry across the "quagmires" through which our forefathers waded in zealous search for light. He cannot look to his teachers for a set of formulæ of definite and unvarying course of treatment for each particular pathological condition; he can only expect to be instructed in general and comprehensive principles, based on which, he enters with confidence the practice of a liberal profession. Then, with zeal in the solution of the ever-varying problems presented, he will learn how to estimate life-force, learn how to diagnose, by computation of the tendencies and liabilities belonging to differing constitutions, conditions, and habits of life. Thus, step by step, he climbs the ladder slowly, till he reaches the acme of his first ambition, where it is crowned by the official endorsement of his fitness to practice his chosen vocation.

Does his student life end here?—He has just learned the first step,—has reached the dangerous stumbling-place where advancement is often checked, and sometimes totally lost. As a child is apt to become too confident on climbing to the first round of a real ladder, so a young man may become too confident in the beginning of his professional life. Dr. Atkinson has said: "Big I of egotism is often the millstone about our necks;" and I believe it was Dr. Samuel Johnson who said, "It is a universal and unfailing axiom that all pride is abject and mean. It is always an ignorant, lazy, or cowardly acquiescence in a false appearance of excellence, and proceeds not from consciousness of our attainments, but insensibility of our wants. The utmost excellence at which humanity can arrive is a constant and determined

pursuit of virtue, without regard to present dangers or advantages; a continual reference of every action to the divine will—and an unvaried elevation of the intellectual eye to the reward which only perseverance can obtain.”

Let it be understood that there is yet enough to learn to make a primer. Life is the sum of little things. A snow-flake is a little thing—so delicate as to melt at the touch of our finger, yet an aggregation of these feathery atoms has been known to defy—to stop—a mighty steam engine in its course.—*Southern Dental Journal*.

### HERBST'S METHOD.

(In the First District Dental Society of N. Y.)

Dr. W. G. A. Bonwill. I would like to ask one question of Dr. Bödecker. Why is it that Dr. Herbst has to use so much hand-pressure before he uses his rotary movement?

Dr. Bödecker. It is not to condense the gold by means of hand-pressure so much as it is to pack it down so that the rotary burnisher will carry it to places where you want it. If you put some cylinders into a cavity, as he did several years ago, and as I did it myself, the gold will be whirled around in the cavity, and ten chances to one you get it where you do not want it; so that the hand-pressure dentistry comes into use to bring the gold to the point where he wants it, and where it is then condensed by the rotary motion.

Dr. Bonwill. It struck me that one-half the time was consumed in packing by hand.

Dr. Bödecker. Yes.

Dr. Bonwill. What is the object of machinery in dentistry if is not to avoid as much as possible all manipulative work,—all of that kind of work which was done heretofore by the hand-mallet, or the automatic mallet, so-called, which causes so much exhaustion of nervous force? It seems to me that the adoption of machinery was for the purpose of obviating that. That is the reason why I adopted very early the method of filling with the electric mallet. It saves time, labor, and the patient. In looking at Dr. Herbst in the many operations which he performed in New York, Philadelphia, Asbury Park, and Niagara, it struck me that if you analyze the action of the electric or mechanical mallet in the hands of a man who understands how to use them, you get precisely the same thing as Dr. Herbst without any hand pressure. If I had to go back to *any* hand-pressure, which Dr. Herbst did in at least one-half of his work, I should feel that I was going backwards in dentistry. I can commence a filling from a single point, and, without any hand-pressure whatever, impact as much gold into a cavity by either the electric or the mechanical mallet as it is

possible to get into a cavity, and place it as perfectly against the walls as it is possible to do by any instrument, and I will do it in one-half the time in which it can be done by the Herbst method or by any other, and by a rubbing blow.

In looking at the time required by Dr. Herbst, as given in the last *Dental Practitioner*, I found that in the most rapid movement the amount of gold foil consumed would be one grain to the minute, and that in a matrix out of the mouth.

Dr. Bödecker. It has never been so.

Dr. Bonwill. From the figures given, I calculated that it would be about a grain to the minute. I know that I can, one hour after another, pack in at least one and a half grains a minute, or nearly two grains a minute if I use heavier gold; and any one can learn to do the same thing. I do not see the necessity of consuming more time than from forty-five to fifty minutes in packing one book of foil.

Then take in consideration the little labor that is required to pack it in. It is as painless to the patient as any other method, and will save a great deal more time with the majority of men. That is my experience. I use no matrices. I have no use for those things. I think Dr. Herbst will come to the same conclusion when he goes home. He can learn to pack gold faster and better with the mallet than he can possibly do it with the rotary burnisher, and a great deal easier to himself and with just as much comfort to his patient,—with more comfort, take it altogether. That is what I think. It will make a vast difference when he comes to prepare his cavity differently. I do not think he will use his method to the same extent.

Dr. Bödecker. Mr. President, if I may be allowed to say a few words more in explanation, especially of this point, Dr. Herbst on several occasions said to me, and stated I believe at one of the meetings very plainly, after seeing the rapid way in which Dr. Bonwill packed gold into cavities of teeth, "If I had been able to pack gold only the one-hundredth part as well as Dr. Bonwill does before I commenced my method I would never have attempted to do it in the rotary way. I had a mallet, but I did not know how to use it. I had no body to teach me how to insert a filling with a mallet or with hand pressure, or in any other way; I was there in the woods all by myself, and I had to invent a method." But a gentleman who has been going on in this way for nearly eight years is hard to convince that he should throw away the method by which he has got along well and take up the mallet, an instrument which certainly to him would be a thousand times more difficult.

Dr. Bonwill calls your attention to the average time consumed in packing gold by the rotary process; and he is correct; but if you pack

it in the way in which I have advised, you save a great deal of time, and Dr. Bonwill will agree with me in this. In the first two thirds of the operation Dr. Herbst can introduce gold twice as fast as you can do it with the mallet, but the last third of the operation takes more time than is required with the mallet. Even in Herbst's hands the last layers take the most time. And it is just for that reason that I advise the use of the mallet for those layers. I have used the electric mallet and the Bonwill mallet for many years. I can work with them quite fast, but not by any means as fast as Dr. Bonwill. In the first part of the operation, I can assure you, gentlemen, that you will save more than one-half or two-thirds of the time if you will begin to fill your cavities by the Herbst method. It is only in the last layers where you need to use so much hand-pressure to tack it down to where you want it before using the rotary burnisher in the engine. In putting on the last layer Dr. Bonwill is right in saying the Herbst method consumes more time than is required with the mallet.

Dr. Bonwill. I made the assertion some time ago, at a meeting at Asbury Park, that I could pack Abbey's old-fashioned non-cohesive foil as perfectly and as easily with my mallet as I could any adhesive foil, and make it weld as perfectly. I gave to Dr. Herbst, who ran out of gold at the time, a piece of Abbey's No. 30 old-fashioned foil, and he seemed to pack that on with as much velocity and ease and comfort as he did the Wolrab gold. The packing on as he did of that old-fashioned foil convinced me more fully of the point I had taken in regard to the packing of Abbey's old-fashioned foil with my mallet. That is a very important thing; for it was not known, and was not even believed after I had asserted it. You can pack Abbey's foil with the mechanical mallet more perfectly against the walls of the cavity, and afterward add adhesive gold, than you can do it by any other method.

The introduction of the electric mallet was the first successful attempt to perform the work of filling by a power extraneous to the human body. Up to that time, in the operation of filling teeth with the mallet, you could only give an individual blow, and that blow was given on an individual spot. You could not move the instrument across the surface at the time the blow was struck; there must be an individual blow, and only one at a time. But with the electric or the mechanical mallet you got three to six thousand blows to the minute; and every one of those blows is a perfect packing blow. Instead of putting the instrument down you can move it across the surface, and in the same amount of time it would take for one blow alone you can do four times the amount of work.

If my electric and mechanical mallets have been unpleasant to

patients at times, it was where the operators did not understand that point. Four blows are given before you can take the instrument up and move it to another place, and you get more blows on one point that do not do any good. By moving the instrument over the surface of the gold constantly, the work of condensing is done with great rapidity and with less discomfort to the patient. You have wondered to see me operate so rapidly, and it has been said that a man cannot work so rapidly and do the work well. But I am of a nervous temperament, and I claim that if one understands enough of mechanical principles to produce the instruments I have he certainly should be able to use them and to fill teeth with facility. While I do fill teeth rapidly, at the same time I do it well; and the rapidity of my operating is not due so much to my nervous temperament and mechanical turn as it is to the sliding movement of the instrument that I adopt. If you get into the habit of waving it across the surface you give a different sensation to the patient, and also save two-thirds of the time that would be otherwise consumed. I can pack in day by day a book of foil in forty-five minutes. I do not want to work any faster than that; and I know I please my patients, or I would not have so many. Knowing what I do of mechanical principles, I am perfectly satisfied to ask this question to-night. Do you suppose I could do any better with the method of Dr. Herbst than I am doing, or produce better operations than I can by the method I am already using?

Dr. Bödecker. Gentlemen, I think the perfect adaptation of gold to the walls of cavities that is obtained by the rotary movement cannot be obtained, at least from a microscopical stand-point, by any mallet that I have ever tried. Dr. E. Parmly Brown, as you know, put in a filling at one of the clinics with the greatest care with the mallet, and took more than double the time in packing the same amount of gold that was required by the rotary movement; and yet the plug was quite imperfect in regard to the adaptation of the gold to the walls of the cavity.

Dr. Bonwill. The question is whether you would advise me to abandon the mechanical mallet. If we can do good work in that way, is it not better for those men who have spent a lifetime in coming up to the point to stick to the method they have learned? It is a hard task, after a man has gone through a course of study and practice to reach a certain point, and after he has arrived at the age of fifty years and feels that he is just beginning to do his duty properly, for him to abandon his methods and pick up something else by which he may possibly do better. Had he not better stick to what he has learned with so much labor rather than throw it aside and take up something that he "knows not of?"

Dr. Bödecker. Mr. President, and gentlemen, I can only say, as I have said before, that as the adaptation of the gold by this method proves to be better than the adaptation attained by any malletting process, and as, in my judgment, the perfect adaptation of the gold against the walls and edges of the cavity is exactly what saves a tooth, I would therefore practice the Herbst method if it were only as far as lining the cavities with it, making the rest of the filling with the mallet, if you please. I use your mallet, Dr. Bonwill, to-day for finishing, but the first layers of gold I should certainly prefer to be inserted by the Herbst process.

Dr. Bonwill. Taking all things into consideration, I do not think I would like to give up my method, which I am mastering more and more all the time. I feel that I am doing better operations than I ever did before in my life. I cannot decide yet till I try Dr. Herbst's method thoroughly. If he will do with my method and instruments what I shall do with his, I think he will find that he can save an amount of labor that "he never dreamed of in his philosophy."

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### THE DENTAL PROFESSION IN ENGLAND.

W. H. WAITE, D. D. S., LIVERPOOL, ENGLAND.

It is exactly ten years since I had the honor of presenting some not very flattering aspects of the condition of the dental profession in my country. To-day, it is my pleasing duty to report a rapid improvement.

In August, 1875, a public meeting of dentists was summoned by invitation of Sidney Wormald to assemble in Manchester, the most central city in the north of England, to consider what could be done to remedy the glaring evils that had become rampant in the dental world.

Up to this time the dental profession was a body without a head, but afflicted with an enormous development of tail. The Odontological Society of Great Britain had foresworn all but scientific subjects, and there was no apparent means by which the public could be protected from the depredations of uneducated and unprincipled adventurers.

Chaos and apathy divided the honors. Those who might have inaugurated reform remained silent, till the dry bones were shaken by this meeting in Manchester.

The outcome of this meeting was the formation of a "Dental Reform Committee," composed of representative men from different parts of the country, whose aim was to procure an act of legal provision, making it compulsory for all who entered the practice of dentistry to receive special education before assuming the title of dentist.

The task thus undertaken was neither easy nor hopeful. The proverbial tardiness of legislation was increased by covert and active opposition. The doctors and druggists were both alarmed, lest they should be deprived of the innocent amusement of extracting teeth.

Rather than imperil or postpone the whole subject, the executive of the Dental Reform Committee consented to allow doctors and druggists the privilege of extracting teeth and of calling themselves "dentists."

Eventually, however, in July, 1878, about three years after the Manchester trumpet first sounded the alarm, the "Dentist's Act" passed both houses of Parliament and received the Royal assent.

This act forbade any person, after August, 1879, assuming the title of dentist, and required all practicing prior to this to register under the act. By this means the door of admission to the practice of dentistry in Great Britain was closed to Tom, Dick and Harry, till these individuals should have passed through a prescribed curriculum of study, submitted to a thorough examination, and obtained the necessary license.

The name of John Tomes is familiar to dentists throughout the world, and it will descend to posterity, associated with laborious investigations in the realms of science, and as the head of this great movement. James Smith Turner, must be honorably mentioned; to his sleepless watchfulness and untiring energy much of the rapidity of our advancement must be attributed. To these two men, ably supported by the counsel and co-operation of the whole committee, belongs the credit of success.

The College in London had, with true British dignity, long since closed its doors except to pupils per curriculum, and with real British obstinacy practically refused every appeal for re-opening. Again our honest friend at Stockport, Sidney Wormald, solved the problem, and applied himself bravely to the task. Another meeting was called in Manchester, in May, 1877, to awaken interest on this subject, and endeavor, if possible, to induce the College of Surgeons in Ireland, or one of the other licensing bodies of Great Britain, to appoint an examining board for dentists, and issue licenses. Meetings on this subject were held in several of the principal cities of England. A strong representation was made to the Irish College, and they wisely took it into consideration. A clause was inserted in the Dentist's Act, giving authority to each of the licensing bodies to establish a dental department, and immediately on the passage of the act a considerable number (some 400 or 500) of English dentists of repute, and of established practice, entered themselves for examination in Dublin, and thus obtained what in England it was impossible for them to get, a recognized dental qualification.



After awhile the English College authorities determined to open their doors once more, with saving restrictions, however, for the maintenance of their dignity. Also the Edinburgh College of Surgeons, and the Faculty of Physicians and Surgeons of Glasgow, all multiplied facilities for the obtainment of a legitimate qualification.

In England our profession has hitherto held a very ambiguous position; the number of accredited dentists and a demand for them has been small, except in some of the large cities. Such a movement as the admission of 400 or 500 practitioners to the ranks of qualified men could not fail to make a deep impression. Hence we find that in all hospital appointments the L. D. S. is now an essential qualification; that in seeking for recommendations people are notably disposed to ask, "Is he qualified?" and, best of all, in a professional sense, there has been these late years a marked and general increase of good feeling and acknowledged recognition on the part of the medical profession.

The importance of the latter fact can scarcely be measured except by those who know the high and deservedly respected social status of the English "doctor," and (whether for good or ill), the intimate association of the dental with the medical profession, the former being now an acknowledged department of the latter. For a dentist to be recognized as above the level of a tinker or a barber is still something in many parts of England, but an immense improvement is rapidly being effected, and this generation will not pass till our highest hopes in this connection is fulfilled.

The Dentist's Act was passed in the month of July, 1878. The Dental Reform Committee had then performed its functions. The question at once arose, What next? Should the committee resolve itself into its original elements, or should it use the prestige and influence gained by success, for the future providing and guidance of the now legally constituted dental profession?

Much anxious thought and many opinions were given, but manifold good intentions at length culminated in the resolve to organize a permanent association, to be modeled somewhat after the fashion of the "British Medical Association," but possessing enough elasticity to accommodate itself to new and peculiar conditions.

Accordingly, in the month of March, 1879, a public meeting of dental practitioners was held in Willis's Rooms, London, to convert the Dental Reform Committee into the nucleus of a new association. The day was an eventful one in the history of English dentistry. Hitherto there had been far too much jealousy and mistrust and apathy between differing sections, and particularly between the metropolitan and provincial members of our body. If success were to attend any

future enterprise, there must be mutual conciliation and earnest resolve to work generously and patiently together.

The venerable leader, John Tomes, respected and trusted by all, presided over the meeting, at which between one hundred and two hundred dentists were present, from all parts of the country. Resolutions gratefully recording past labor, and constituting the Reform Committee into a Representative Board were unanimously passed. Thus, with quiet, wistful spirit, and with much hope and self-devotion of many, there came into existence the "British Dental Association."—*N. Y. Trans.*

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### MANAGEMENT OF EXPOSED PULPS.

DR. W. T. MARTIN, YAZOO CITY, MISS.

That failures in treating exposed pulps have occurred, and will continue to occur, should not be surprising. They result from non-recognition of pathological conditions, or inability to so manipulate as to form a suitable capping. Could a correct diagnosis be formed, the methods of treatment would be greatly modified. The aids to such diagnosis have been ably set forth by eminent special pathologists. In reviewing what has been written on the subject of exposed pulps I am impressed with the indiscriminate use of medicines, being selected and used mainly for their power of obtunding sensitiveness and suppressing pain without regarding their mode of action. While medicines may not produce the same effects in all cases when locally applied as when administered systematically for a similar purpose, yet there are many that do, and for this reason are particularly adapted to local use. From these we should make selection with careful discrimination in their medicinal properties, manner of action and effects produced. So long as such indiscriminate medication is pursued in treating exposed pulps, we will continue to record failures and mark the prevalence of alveolar abscess.

When pulp exposure occurs by disease, the process of disintegration is usually so slow that irritation by interfiltration of the oral fluids has been of such long duration as to establish well characterized inflammation, sometimes producing a pain demanding speedy relief. Where inflammation and pain are present, chisel away the useless thin enamel overhanging the walls of the cavity of decay and scoop out the loosened debris within. Then thoroly exclude moisture, and wash the interior of the cavity with a small quantity of a solution composed of 5 drops carbolic acid, 7 grains common soda, 7 grains borax. and 1 ounce water.

This solution cleanses the cavity and neutralizes its remaining contents, possessing sufficient antiseptic properties to meet the demands.

After a sufficient time has elapsed for obtaining these desirable effects most thoroly, dryness should be secured, and the excavating of the disorganized dentine from the walls proceeded with, repeating the application of the solution on the removal of each layer of softened dentine, till the excavating is completed, which can be accomplished thoroly in most cases by pursuing this course with a remarkable freedom from pain, the pain from the pulp having subsided even in many of the cases that report a dull aching for some hours preceding the operation. Should there be a continuance of pain from this source, it must be treated on special pathological symptoms. If inflammation exists, unattended by other complications, antiphlogistic applications are in order, and when such is the case the pain will usually promptly subside on the application of a small quantity of tr. aconite. When it is allayed and its non-recurrence is reasonably sure, the pulp should be protected by suitable dressings from irritants of every nature, and kept under observation from day to day till it reaches the nearest approach to a normal condition. Such dressings are conveniently made by dropping into the orifice of exposure the smallest possible quantity of collodion, covering with a small bit of paper, placing over it a thickness or two of asbestos felt held in place and protected from pressure by the introduction of a suitably shaped metal cap dipped in chloro-percha previous to its being carried to position. The remainder of the cavity may then be filled with almost anything easy of removal, and that will prevent the ingress of foreign substances, and whenever their removal or changing is indicated care should be taken to exclude moisture, thus preventing the danger of renewed irritation from that source. These dressings to be worn till the symptoms indicate a proper performance of its function by the pulp, when the final capping may proceed. Pulp exposed by accident, or wounded pulps, usually heal kindly under such dressings.

Suitable materials for caps are non-irritating, non-conductors of thermal changes, capable of being so adjusted as to fill the opening of exposure without exerting pressure and becoming sufficiently hard to admit of the thoro condensing of the final filling. These properties we have combined in some of the cements now on the market. In their use the portion for forming the initial covering should be mixt very thin and adjusted to place by flowing into the opening. The chances of irritation may be greatly lessened by dropping on the exposed part of the pulp a small quantity of collodion previous to the introduction of the first layer of cement. After this layer of cement has hardened sufficiently to withstand the pressure necessary for covering it with a layer mixt to a thicker consistency, such a layer should be introduced as will make the cap of the desired form. There is

another class of cases that I believe to be claimed in some instances as successful cases of pulp capping. I have reference to those where after the removal of the disintegrated tissues a protecting layer of semi-devitalized dentine is left and no actual opening to the pulp exists. In many irritation by long continued interfiltration of the oral fluids may produce inflammation of the pulp tissue with all of its concomitant results; but if undertaken before inflammation has set in, they are more amenable to treatment and much more easily brought to a successful termination than any case in which an actual exposure of pulp tissue exists. In all cases of pulp exposure, of whatever nature, success much depends on the recuperative powers of the tissue involved, this being far greater in some than in others, and influenced by systemic conditions. Nature exhibits wonderful powers in the healing of injuries. We can only aid it in this work of reparation by giving it timely assistance, and I believe this can be better accomplished by pursuing the system of treatment herein advocated, than by resorting to stronger medicines that allay the pain attendant on pulp exposure by violent action, and thus admitting of immediate capping, which is trusting to nature the work of recuperation, not only of existing injuries, but also the recovery from the action of the medicine used.—*Miss. Trans.*

**The Difficulty of Filling at the Cervical Margins** without cracking the enamel. Liability to this accident depends on the shape of the cavity at this point, the form and size of the instrument used in packing, and the amount of gold carried before it.

If the enamel has frail and overhanging walls, or the first piece of gold introduced or the points of the instrument are so small that the latter can pass through the former, or in any way come in contact with the tooth structure, then the wall is apt to be fractured. Therefore, at this point too great care cannot be taken to have the wall of the cavity straight or with but a slight undercut, and the surface slightly countersunk, as a guarantee against fracture from pressure. Then, with a large pellet of non-cohesive gold, or gold and tin combined, as much as can well be carried into the cavity, and with a broad, flat-pointed plugger, to avoid the danger of forcing the instrument through the gold, with a few firm blows of the mallet the filling should be packed securely at the cervical margin, and then the operation can be completed with such other instruments as are best adapted to the case.

When gold and tin are combined, the tin should always be placed on the outside, because it is more readily adapted to the walls of the cavity, and can better exert the antiseptic influence, which experience and observation demonstrates tin possesses in preventing a recurrence of caries, especially at this point.—*Dr. W. W. Allport.*

## IMPLANTATION.

DR. NORMAN W. KINGSLEY.

Implanting is of recent date, and probably originated with Dr. Younger, of California. He conceived the idea of making an entirely new socket in the solid bone and implanting there a tooth from the same mouth or from that of another person. As this process is in its experimental stage it is not possible to tell yet how long teeth so implanted will remain firm in the sockets, but apparently satisfactory results have been obtained; the teeth in instances thus far tried, when manipulated by a skilled dentist, have taken vigorously to their new environments, and seemingly satisfactory results have ensued.

This process is based on the theory that if the membrane which originally surrounded the tooth still adheres to it; though it has become dried even, it will be revitalized when the tooth is implanted in its new socket. Theories, however, are of little value, in the present stage of the experiments. Still the fact remains, of which there is no question, that teeth have been implanted in these newly-made sockets, have remained for many months and appear to have adhered vitally to the solid tissues surrounding them; they have so remained for eighteen months. I have seen some cases where the adhesion has been so complete that they would defy an expert to tell which were the implanted teeth and which were there originally as shown by the color and translucency of the teeth and the hardness of the gum, all of which were quite that of the original teeth.

I have removed two front teeth standing out of line and disfiguring the mouth of a patient, have made new sockets and have implanted the teeth in a regular line with the adjoining teeth. In this case the teeth themselves, the gum and the bone in which they were placed were all healthy. The teeth were removed while the patient was under the influence of gas, and while they were out of the mouth the pulps of both teeth were removed and the cavities filled with gold. In making the new socket; there was very little pain experienced by the patient; in cutting the alveolar process there was very little feeling, no nervous tissue passing through it; for unless you pass beyond the point which you should there is no nervous tissue to be encountered and consequently there is very little pain. But in cutting the gum and tissues I use cocaine and think that the pain was considerably lessened thereby; at any rate, the patient suffered as little, if as much, in this process as the average patient does in other operations on the teeth.

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The most valuable thing you can ask of your friend, is for a portion of his time.

## TREATMENT OF PULPLESS TEETH.

DR. W. H. TAGGART, FREEPORT, ILL.

In the treatment of pulpless teeth, we need the very best and toughest of little broaches, and none that I have ever used are equal to those made from piano-wire. They have sufficient spring to keep them from kinking, or breaking off in the roots. Some dentists are in the habit of ignoring all roots into which they cannot pass a *barbed* broach, saying if the canal is so small the amount of decomposed pulp can do no harm. This is a mistake; the barb on any of the broaches we buy makes that broach almost twice as large as it would be without the barb; consequently a great many roots remain uncleansed that might be just as thoroughly cleansed as larger ones by using smooth broaches. My way is to take the smooth broach and lay it on the bench, and draw-file it with a No. 1 separating file. This makes little grooves lengthwise on the broach, and it will then hold the finest shred of cotton without any danger of its coming off, and those who have not tried these broaches will be surprised at the small canals they can follow. Do not rely as much on medicines in these small roots as you do on the small delicate broach, skilfully used. In doing this thoroughly you will find less and less need for medicines, and a great deal more satisfaction.

I think considerable harm is done by some extremists in recommending remedies. Here is a dentist who might have been reasonably careful in cleansing canals by working hard. He sees an article in a magazine recommending say, iodoform, stating that it will thoroughly disinfect a root, and that it has been applied to the pulp chamber without any cleansing and the cavity sealed up, and the tooth has remained comfortable now for two months. What a bait for the dentist who is inclined to be careless. He grabs it and says all the hard work of cleansing roots is over; the consequence is, that case, or any other treated in the same manner, will be a failure. Another recommends bichlorid of mercury to mummify the pulp. Mummify sounds very well, but beware, for tooth-pulps will not *stay* mummified as the old Egyptians did. Another recommends liquid gutta-percha to fill roots with—possibly as good a thing as we can use—but spoils it all by saying that it can be pumped in, and if any goes through the end of the root no trouble will follow, as it will become encysted, as even a bullet may in a man's flesh. But bear in mind that where one man lives with an encysted bullet in his body a thousand die, because the bullet would not become encysted. Be delicate and extremely careful, and remember that there never yet has been a root-canal any too thoroughly cleaned and filled. Shirk nowhere; do evrything as well as it can be done.—*Ind. Trans.*

## SERRATIONS ON PLUGGERS.

DR. H. H. WAY, ST. THOMAS, ONT.

The smooth convex points of Dr. Mills and some few others are designed not only to condense the gold down into the cavity but also to spread it out laterally, securing a thorough adaptation to the walls. I can also indorse the Herbst' method but practically most operators will remain with the mallet in some form.

With the instruments as usually furnished us, the outer rows of serrations are bevelled outwardly something like the letter M, and in using this style of point the tendency is to withdraw the gold away from the margins; whereas if these outside serrations had also a bevel inward, thus,  $\Lambda$ , we would obtain better results.

For several years, I have secured this simply by bevelling on a fine corundum wheel, of course with broad pointed pluggers the outer row of minute points will become much shorter. This method has the double advantage of giving the end of the instrument a general convex outline, and also the benefits of a wedge-shaped instrument. For the smallest pluggers, the above plan becomes somewhat modified.

I speak of the above method simply for the good there may be in it; and whether the idea be new or old I care very little. And Mr. Editor permit me here to enter a protest. If there is one individual I despise beyond another, among the many attending our meetings or contributors to the journal it is he who is jealous of any good thing not emanating from his own brain. Such a person is ever ready to rush to the front to make a prior claim whenever anything new is presented. There has in the past been too much of that spirit manifested for the general good.

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**Making loose plates fit.**—In Dec. No. E. C. Davis asks, Is there any way to make a loose plate fit?

I have been quite successful with this method: Take a sheet of base plate wax warm it and place evenly on the plate. Immerse in warm water till both are warm. I take the impression by letting the patient close the jaws firmly; remove, and trim off surplus wax on the edges then flask in plaster. Heat, wash off all the wax, replace with gum using Welch's rubber solder freely and vulcanize. For lower plates it is specially good.

GEO. R. HUTCHINSON.

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**To Soften Vulcanized Rubber.**—What has apparently perished may be renewed by boiling it in a saturated solution of common soda for ten minutes: wash it after in warm water till it assumes a soft black surface. If the rubber is pure it will be as good as ever.

Baltimore, Md.

DR. D. GENESE.

## AMERICAN DENTAL ASSOCIATION

(Last Meeting—Editorial in *Dental Eclectic*)

To be sure many of the old things were said in an impressive way, and some of the old speeches were revamped and newly turned for the occasion, but certainly there was a most unaccountable lack of originality, and token of primitive research for a meeting of the best men in dentistry. We have become habituated to the boast that dentistry is the most progressive of all the sciences, and that our rate of progress is astounding. We have just passed another anniversary, and what has been done to make good this vaunt?

During the past year the various dental journals have published to the world some meritorious papers—essays that indicate a depth of research, a breadth of investigation, that is creditable to us as a profession. But with two or three exceptions what evidence of study was presented at Niagara? There should have been a plethora of original papers, so that it would have been impossible to read them all except by title. In reality there was a dearth of essays, and one almost sighed for another chapter of Stephen Pearl Andrews' "Alwato" to break the monotony.

The above is an extract from an editorial in the September number of the *Independent Practitioner*. Dr. Barrett evidently does not hesitate to speak openly his mind, and we are glad that he has done so if thereby a reform in these society meetings may be established. We must confess however to a feeling of sorrow and disappointment on reading Dr. Barrett's article. We had always expected so much of the American Dental Association, and we think much should be expected of it and its proceedings.

But it seems that the great failing of all our association meetings has manifested itself in the proceedings of the American, that of dearth of originality and insipidity of a large part of the papers and discussions. The many associations organized throughout the country are productive of incalculable benefit to the profession, but how much more useful would they become if more attention was paid to the preparation of papers and the careful discussion of the intricate problems of the science, than the rehash of old matters and the clothing in specious language of threadbare and wornout subjects. Who shall suggest a remedy and how shall it be applied?

## Dental Section of the International Congress of 1887.—

Dr. Taft, the president of this section, says: Preparations are being made for a very extensive and complete presentation of clinical and prosthetic work. The aim is to arrange for ten to twelve operating chairs which may be used by the best operators of each country, and thereby have all the best methods presented by the best skill in the world. Benches, lathes, furnaces, etc., will be furnished for the use of the best skill that can be found in prosthetic dentistry. Thus will



be demonstrated all the various methods of constructing and inserting artificial substitutes. Facilities will also be made for various branches of scientific work, microscopical and histological, with illustrations of the best kind. Operations on, and treatment of, exposed pulps, diseased gums, and other soft tissues of the mouth will be performed by the best ability procurable. Thus you see the plan is devised for large things. I trust the meetings will be so arranged that sufficient time will be afforded for the profitable carrying out of this scheme. The clinics and practical work will be conducted in the best possible adapted rooms to be obtained in the vicinity of the hall in which the meetings of the Section will be held.

#### **A Novel Preventive of Hemorrhage After Extraction.—**

A gentleman called on me October 13th, 1883, to have a second upper right molar extracted. He had a few years before lost the third on the right side, and to his horror woke up to find the bed clothes covered with blood. He told me two medical practitioners were sent for, and one remained with him for two days before they succeeded in stopping the hemorrhage. This put me on the *qui vive*. I extracted the tooth, which was a little loose; it did not bleed much at the time, which I thought was a bad sign, and as soon as the bleeding was over replaced the tooth after cutting about the  $\frac{1}{8}$  of an inch off the three fangs and dipping it into some carbolic acid and glycerin, one part to three. As he lived some distance away, I asked him to write and let me know if he had any trouble with it in any way. Some three months after I wrote and asked him about it, when he replied saying he had had no trouble with it, that the tooth fell out about a week afterward, and he was glad to say no hemorrhage had occurred. I have always followed this plan for some years in cases where patients have warned me beforehand, and have never had any difficulty. I cannot say if the above suggestion will be new or not, but it may possibly be of value.

Berwick, Minn.

JOHN WELLS.

**Nodules.**—In the Odonto-chirurgical Society of Scotland, Mr. Wilson said he did not regard the formation of osteo-dentine nodules in the pulp as pathological, and did not consider their presence led to pain. They occurred in many of the other mammalia, and in them seemed to be accompanied by an enormous development of cement, which, in the bicuspid of the adult walrus, formed the larger part of the tooth.

Mr. Amoores said he thought the presence of these pulp stones is far more general than usually supposed. He remembered hearing of some one who split open several teeth free from decay, selected from

the dissecting room, and with few exceptions, he found nodules. He had noticed them in the pulps of teeth the subject of chronic inflammation, and, in one instance, the pulp was converted into hard tissue, the tooth, the cause of great pain, being entirely free from caries. They are found in healthy young teeth, removed for regulating. He could scarcely agree with Mr. Wilson that their formation is parallel to the normal condition of teeth in the walrus, for though the processes in human teeth it is usually carried on so imperfectly, the analogy is unsafe to prove they were the cause of pain.

He was inclined to think in many instances, they were the occasion of the trouble, probably by involving some nerve filaments in the same way that a contracting cicatrix was said to give pain, but it is difficult to determine.—*Dental Record*.

**Eugenol.**—A correspondent of the *Dental Cosmos* says: Eugenol is of great value used as a disinfectant, antiseptic, deodoriser, and obtundent. It is a superior agent in all these particulars, and is free from the objectionable characteristics usually belonging to the class. Though sharp to the taste, it is not especially disagreeable. It is not caustic, like carbolic acid and creasote. It is not destructive to the tissues, and there is nothing to fear from a little excess in using. It can be employed without extra caution for thorough saturation of infected dentine, or passed freely to the extreme points of the root-canals. While it thoroughly disinfects, it does not cauterise. It does not coagulate the albuminoid surface, leaving material for putrefaction beyond in pulp-canal and dentinal tubules, as carbolic acid does, but penetrates, saturates, mummifies, and *stays*. A root-canal in which it has remained a day and a night is safe to fill though previously septic. Eugenol represents the strength of the essential oil of cloves. Whether its virtue comes from additional oxygen, or mere exclusion of non-essential elements, is uncertain. It is of great value in the treatment of pulpless teeth. As a pain obtundent, by application to super-sensitive dentine, eugenol has the virtues multiplied of the time-honored oil of cloves. This, with its disinfectant qualities and general innocence, gives it a value above any agent with which we are acquainted, for use in teeth containing living pulps.

**Fillings** in carefully prepared cavities often fail at their marginal walls. You cannot perfectly adapt gold to a sharp edge of enamel. By beveling the wall this difficulty is obviated, as the gold will hold the enamel, and *vice versa*. Do not allow the contact of proximating walls to be in contact in the region of the margin of a cavity.—*Dr. W. O. Kulp*.

## FRONTIER DENTISTRY.

Some years ago Mr. J. W. D., an early settler in south-western Iowa, had a cavity in the labial surface of a central incisor, which he had excavated with a pocket knife, and plugged with a carefully fitted bit of deer's horn, dressed even with the enamel.

I had the pleasure of seeing this curiosity of frontier dentistry after it had preserved the tooth for eighteen years: it was a complete success, even in color it was but slightly different from the tooth. s.

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**The tongue as the indicator of the system.** A white-coated tongue indicates febrile disturbance; a brown, moist tongue indicates disordered digestion or overloaded *primæ viæ*; a brown, dry tongue indicates depressed vitality, as in typhoid conditions and blood poisoning; a red, moist tongue indicates debility, as from exhausting discharges; a red, dry tongue indicates pyrexia, or any inflammatory fever: a "strawberry" tongue, with prominent papillæ, indicates scarlet fever or rotheln; a red, glazed tongue indicates debility, with want of assimilative power of digestion; a tremulous, flabby tongue indicates delirium tremens; hesitancy in protruding the tongue indicates concussion of the brain; protruding at one side indicates paralysis of the muscles on that side.—*Pacific Record*.

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**Wrapping a Broach with Cotton.**—Take some fibers of cotton and pull them out so that only a few will reach to the point when placed; hold these fibers between the thumb and finger of the left hand, and apply them to the broach just far enough from the handle to give room for the right thumb and finger to follow. The handle is now entirely let go; the right thumb and finger grasp the broach near the handle, including some of the cotton, and the whole is rapidly revolved. Meantime the left thumb and finger only press the fibers to the broach as they gradually slip along to the point. In this way one or two fibers may be securely wrapped on the finest broach.—*Dr. G. Newkirk*.

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**The Difficulties about Sleep** and sleeplessness—apart from dreams—are almost uniformly fruits of a perverse refusal to comply with the laws of nature. Take, for example, a man who cannot sleep at night, or rather who, having fallen asleep, wakes. If he is what is called strong-minded, he thinks, or perhaps reads, and falls asleep again. This being repeated lays the foundation of a habit of waking in the night, and thinking or reading, to induce sleep. Before long the thinking or reading fails to induce sleep, and habitual sleeplessness occurs, for which remedies are sought and mischief is done. If the wakeful man would only rouse himself on waking, and

get up and do a full day's work, of any sort, and not doze during the day, when next the night came round his sixteen or twenty hours of wakefulness would be rewarded by a sleep of nine or ten hours in length; and one or two of these manful struggles against a perverted tendency to abnormal habit would rectify the error and avert the calamity. The cure for sleeplessness must be natural, because sleep is a state of natural rhythmical function. You cannot tamper with the striking movement of a clock without injuring it, and you cannot tamper with the orderly recurrence of sleep without impairing the very constitution of things on which the orderly performance of that function depends.—*The Lancet*.

**Dr. W. A. Trueman** says that amalgam will contract or expand according as it is used. If used with too much mercury, it will shrink as well as dissolve; but if employed dry, or in such a condition that it will work well, it would not shrink, and would be less liable to dissolve. A great deal of its behaviour is due to the manner in which it is manipulated. He is sometimes afraid to use it very dry in frail teeth, on account of its expansiveness when employed in that condition.

**Deaths of Eminent Men.**—The year 1886 will be remarkable for the great number of deaths among the eminent men in all callings of life. Death has been especially active in the medical profession, such eminent characters as Carpenter, Dalton and Flint having obeyed his mandate. We are again called on to chronicle the death of one of world-wide fame, that of Dr. Frank H. Hamilton, of New York.—*Dental Eclectic*.

**Thinking and Working.**—In our present system of education—now happily passing away for a better one—we want one man to be always thinking and another to be always working, and we call the one a gentleman and the other an operative; whereas the workman ought often to be thinking, and the thinker often to be working, and both should be gentlemen in the best sense. As it is, we make both ungentle, the one envying, the other despising, the other; and the mass of society is made up of morbid unhealthy thinkers and miserable workers. It is only by labor that thought can be made happy, and the profession should be liberal, and there should be less pride felt in peculiarity of employment, and more in the excellence of achievement.—*Pop. Sc. News*.

**Is lime water alkaline?**—Dr. Register says it is "a harmless alkali." We think it is not, for if an alkali is added, it immediately neutralizes its brackish taste, and by precipitating the lime the water becomes soft. Adding an acid has no such effect.

### WAS IT HONEST?

In the April number of the *ITEMS OF INTEREST* there appeared an article with the above caption by Dr. Norman W. Kingsley..

In the July number there was a communication from Dr. W. W. Allport, to whom it is possible Dr. K. referred, suggesting that he furnish for publication the original of a certain explanatory letter and itemized statement of the monetary transaction of the question involved in the case mentioned.

Having waited five months and seeing no response, I would suggest to Dr. Kingsley that he comply with the suggestion made by Dr. Allport, that the subject may be cleared up. L. P. HASKELL.

### BAD BREATH.—IN THE OCTOBER ITEMS.

In reply to me, I am astonished at H. M. Ramsden challenging any ordinary observer of the conditions of the mouth to "give a better remedy for bad breath," than charcoal. Remedy means that which cures disease.—Webster. If charcoal "fills the bill," why is it our distinguished authors, both Allopathic and Homeopathic, have not adopted it as a specific? Each individual case requires a special remedy. Bartholow gives Permang. Potassa, Chlorine, Carbolic Acid, etc., but no mention of charcoal. DR. J. CALDER.

Evanston, Wyoming Territory.

**The Swiss Jewelers' Broach, No. 10.**—I do wish to urge the utility of these in the treatment of root-canals. These broaches are very delicate and easily entered into the finest canals, and are quite durable. The majority of teeth with dead pulps have very little matter within the canals requiring a barbed broach for its removal. The contents consist usually of broken-down and softened tissue, which can be removed without incurring the risk of passing a barbed broach. He must have more nerve than I who will enter an ordinary root canal with a barbed broach.

My method of drawing the temper of the jewelers' broaches is to place a dozen in a tin box the size of a finger; fill with unslacked lime; heat the whole red hot, and allow it to cool slowly. They are then to be polished with a pine stick, with pumice, on an Arkansas stone.—*Dr. J. H. McKellops.*

Made still better by drawing a separating file lengthways along their surfaces to groove and roughen them.—ED. ITEMS.

Live the present life well, and at the close there need be no regret for having lived, but rather a feeling of gratitude for having been placed here to see, think and perform.

## For Our Patients.

### FROM "HEALTH AND HOME."

Sick headaches, neuralgia, earache, catarrh and affections of the eyes and throat are frequently but the reflex action of diseased or decayed teeth. Consult a competent dentist and you will frequently save large doctor bills and much suffering.

The fact of your employing a dentist is evidence that you have confidence in his honesty and ability. Be consistent, then, and trust to his good judgment and skill without annoying him with useless questions while he is doing the best he can for your interests and comfort.

Some mouths that dentists are called on to examine are disgusting—reeking caverns of disease and death, while the possessor seems utterly oblivious of the punishment he is inflicting on his suffering fellow mortals. He should, like the leper, call out, "*Unclean ! UN-CLEAN !*" Nature does it for him, however.

A little food, well assimilated, yields far more nutrition and life than quantities crudely digested. It is vastly important that we chew our food thoroly, and that we keep the salivary glands in a healthy, sound and vigorous condition. It is impossible to do this, unless our teeth are capable of performing the functions nature requires of them.

That is the highest art which conceals art, is as true of dentistry as of anything else. *Any* operation, anywhere, that is intended to restore or replace natural organs, can lay claim to perfection just in proportion as nature is imitated and art concealed. Apply this test to operations in dentistry if you would judge of perfect work. A glass eye that says to the world by its appearance, "I am a glass eye," would never be worn.

The parent who neglects to have his child's teeth kept in a healthy condition is laying a sure foundation for its future discomfiture. When six years of age, if not before, the services of a dentist should be invoked to examine its teeth and suggest their proper treatment. Untold misery is inflicted on innocent children by a failure to perform this sacred duty. One of the reasons why the teeth of adults decay so rapidly is because this duty is neglected. When will parents learn that they have a responsibility that admits of no compromise ?

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**Frosted Windows.**—Some dentists are troubled by obstructed light by frosted windows. When free from frost dampen them occasionally with glycerin; or make a double window with a ventilating chamber between the glass walls.

At a house in Ohio where a minister was boarding, the servant girl was anxious to anticipate everything in her work that any one wished her to do. She had always "just done it" or was "just doing it" when any order was given. This amused the young divine greatly, and on one occasion he thought to nonplus the girl by a ruse. "I don't think Eliza has washed my Bible since I have been here," he said to the mistress in a low tone, but designed to be overheard by the girl. A few minutes later the mistress said to her in the presence of the clergyman, "Eliza, have you washed Mr. Blank's Bible?" "No, ma'am, but I've got it in soak."

A Mr. Creswell Hewett has made the discovery that quinine may be made by synthesis from an article which may be had in abundance in all parts of the world.

Decayed teeth produce an offensive breath. This is one of the penalties of individual neglect, and, repulsive as a polluted breath is, other penalties are inflicted on the victim of far greater magnitude and more disastrous in their consequences. We can not violate one of Nature's laws without paying a penalty. Every consideration of policy and duty admonishes us to pay attention to the sanitary condition of our mouths.

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### I'VE FOUND A MINE.

Ha, ha! I've found a mine, at last—  
 A mine of gold!  
 And I have sold  
 All else I prize to make it fast.

I found it at my very door,  
 Where I have tramped,  
 And often stamped,  
 Impatient on the precious ore.

For gold my treasury to fill  
 I looked in vain,  
 With toil and pain,  
 On sterile plain and rugged hill.

'Twas only when I ceased to roam  
 I found my mine,  
 Quite in my line,  
 Of daily, honest work at home.

Here now I dig the precious ore,  
 And with delight  
 Enjoy my right  
 To make my treasure more and more.

T. B. W.

## *Editorial.*

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### INJURY FROM RUBBER PLATES.

Dr. W. H. Dorrance, Ann Harbor, Mich., says: "Leaving out of the question the probable mechanical injury from ill-fitting, the number of cases in which the injury is serious is increased to fifty-five per cent." He does not think this is caused by any poisonous quality of the material, but "produced by the retention of heat, the rubber and celluloid being non-conductors,"—"though the fact that the rubber plate cannot be kept so clean as a metal substitute probably somewhat aggravates the difficulty."

1st. We think the percentage of injury is placed altogether too high. If there were so many "sore mouths" from rubber plates as here indicated, it would be seen by the mass of dentists as well as by Dr. Dorrance, and rubber would be abandoned. But the fact is "sore mouths" from any cause are seldom seen.

2nd. Our experience is that where injury is found it is either mechanical from ill-fitting, or from a want of cleanliness.

3rd. We will not say that a rubber plate cannot be made so clumsily thick as to be a non-conductor; but if made as light as it may be with good rubber, it is not a non-conductor.

4th. We have seen as many "sore mouths," in proportion, under metal as under rubber.

5th. The idea that rubber plates cannot be kept as clean as metal plates is nonsense; the reverse is true.

Dr. G. J. Friedrichs, of New Orleans, says: "At the least calculation there must be ten millions of people in the United States who have worn plates of vulcanized rubber. If Dr. Dorrance's conclusions are correct, would not this evil have come more prominently before us? Would this material have been tolerated so long as it has been, under such circumstances? If rubber plates produce these injurious effects, would they not be patent to every one in the profession, so that rubber long ago would have been thrown aside?"

Dr. Louis Ottofy, of Chicago, says: "Prof. Black's recent investigation of this subject is thorough, and the results, if not conclusive, are interesting. It is his opinion, I believe, that it makes no difference of what material the plate is made, if it is kept clean; and he has found that the micrococci grow under plates of all kinds, if they are not kept clean. He has separated and bred them in culture tubes, and has named that class streptococcus magnus. I think when the subject is thoroughly investigated, this theory may fully explain this question. I do not believe that the material of which the plate is made makes any difference. I agree with Dr. Black that disease depends entirely on the cleanliness of the plate."



## CLEANLINESS IN THE DENTAL OFFICE.

We are confident most dentists get so careless of their surroundings, and of their personal habits, in the dental office, that they do not see themselves as others see them.

We were in the office of a first-class city dentist the other day, when we were reminded of this. He is probably so used to his uncleanly ways that he will not recognize the following as descriptive of a scene in his office. We speak of it to remind dentists that they cannot depend on their own eyes or their own calloused sense of propriety. They should be thankful to have others bring it to their attention. If no one will be so kind, let them for themselves look about carefully, and watch themselves constantly, perhaps stimulated thereto by the following:

A lady, in company with another, comes in to have several teeth extracted. The young lady occupying the chair leaves it, and this lady takes her place. Gas is given, and the teeth are removed. As quickly as possible, she is placed on a lounge, and the first lady again given the chair. There is so much haste, that only time is given to shove back the forceps, when the operation of gold filling is resumed. The dentist's hands are not washed, nor the blood stains on the floor. Ah, yes; he does take time to unlock from the chair the besmeared spittoon and place it before the half-conscious patient for further use, and he hands her friend the bloody cloth he has used throughout the operation, and the tumbler half full of blood-stained water, with the remark, "If you would like some clean water for your friend, you will find it out there in the bath-room, where you can take her, to wash as as soon she is able to walk."

When the patient's friend returned from the bath-room she remarked:

"I believe I would rather have teeth out myself than wait on one who is having them out."

"Of course you would," said the amiable dentist, "the patient always has the easiest time of it."

We thought so too, when the friend has to act so emphatically as the dentist's assistant. And we did not see him pay her for her services either.

For some time after they were gone, the blood-covered spittoon on the floor, and all other evidences of the bloody work, remained disgustingly visible.

Soon a young lady came in to make an engagement, and was obliged to sit on this same lounge with the bloody spittoon still before it on blood bespattered paper. Is it a wonder she was disgusted, and left without ceremony.

Do you say this is an extreme case, specially in a "first-class office"? Let us hope so; yet we have seen equally disgusting things in other offices, the occupants of which would be offended if we did not consider them "first-class."

In a large city we saw a first-class dentist go through a very bloody operation, when there was no spittoon attached to the chair. The dentist said, "The spittoon is a very dirty thing, and therefore I never have one about." This lady patient was given a little old, dirty-looking tin-cup to spit in. When he was through, her lap was bespattered all over with blood, and the cup was a disgusting sight. The dentist's hands were covered as though he had been butchering. He had been thoughtful enough to wipe them now and then on a cloth that became more and more bloody; but when through he did not seem to see any necessity of immediately cleaning himself, or of seeing that his patient was cared for. He must first go through a learned expatiation on what he had done, and convince his patient and us that he had shown remarkable skill, and ended her long suffering *without much inconvenience*. And there she still sat besmeared from head to foot, holding the disgusting cup!

Not long since, we were in a city office, "perfectly gorgeous with finery," where a little girl was seated in the dental chair for the inspection of her teeth. After a general observation, the mother was called, that the dentist might show her what should be done, and, a moment later, we were called. As we approached, the stench surrounding the chair was repulsive, and the mother, removing the spittoon with its stand to a distance, whispered to us, "My, what a stench!"

Yet that dentist was unconscious of any offense he was giving. We recited the whole circumstance to him soon after—not mentioning the office in which it occurred. He entirely agreed with us, that such a dentist must be an exceedingly filthy fellow, adding that *he* was very particular with *his* spittoon.

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#### OUR ORTHOGRAPHY.

Some are extremely sensitive to the least innovation in spelling. Do these conservatives reflect that our spelling is continually changing and that they are helping to change it? The only difference is that some are leading and others are being led. We cannot make such spelling as we have now unchangeable. It is too absurd. When we were young a person was considered vulgar if he attempted to shorten the tails of manick, musick, havock, almanack, publick, and such words as favour, labour, arbour, harbour, saviour. He would have been looked on as a pirate if he had robbed an l from travelled, travelling, traveller, marvelled, marvellous, marvelling, marveller,

libelled, libellous, libelling, fullfill, distill, instill, patroll, skillfull, willfull, fullness and woollen. It would have made one gasp in holy horror to have seen a p omitted from worshipped, worshipping, worshippinger, kidnapped, kidnapping, kidnapper, or one e taken out of judgement, abridgement, acknowledgement; or u out of mould, moulded, moulding, moulder, baulk, bould, chaulk. And yet all these changes have gradually taken place, so gradually some of us have not perceived them. Even within a dozen years we have had correspondents—of the respectably aged of course—who write cheque, clinique, critique, queue, guage, gaultlet, guildler, gourmand, savour, etc., but not by the best authority. Let us hope that the day is not distant when our orthography shall truthfully represent the sound of our words.

### THON.

A CORRESPONDENT of *The Evening Post* suggests the compounds *him-her* and *his-her* as genderless pronouns of the third person singular. We are still free to confess our preference for *thon* and *thons*, suggested in these columns a few years since, and approved by many excellent judges. Its use is illustrated in the following sentence: "Call William or Polly, and tell *thon* to put on *thons* hat and call the cattle home." This is better than "tell him or her to put on his or her hat," etc. And it is also better than "tell *him-her* to put on *his-her* hat," etc. There is, indeed, much virtue in *thon*.—*The Critic*.

Five years ago, we suggested this word *thon* as an impersonal pronoun, though it was not original with us. The need of some word to take the place of "he or she," "him or her," "his or hers," "himself or herself," is generally acknowledged. We do not think a better word can be found than *thon*.

In the ITEMS for March, 1885, we had the following:—

"New words are continually coming into use. Their appearing generally shows their usefulness. For a long time, the poverty of our language in its lack of an impersonal pronoun to represent the sex as *one* or *the other*, has been acknowledged and lamented. We presume such a sentence as the following is never written or spoken without a sense of embarrassment, as showing the deficiency of the English language in this respect: "If any teacher is tardy, he or she must present himself or herself to the principal before going to his or her room." Cut out "he or she," "himself or herself," and "his or her," and fit in their place *thon*, *thons* and *thons*. (Pronounce *thon* with the subvocal *th*, as heard in *thou*, and with the *o* as in *on*.) Now see how euphonic your sentence reads: If any teacher is tardy *thon* must present *thons* to the principal before going to *thons* room.

Of course we shall need a little familiarity with the newcomer, but it will certainly grow in favor as it grows in age. Soon the astonishment will be that it was not born sooner. Take a few parallel sentences:

"Not one was exempt; but as each passed from the boat he or she was searched for dutiable articles that might be concealed about his or her person." Read it thus: Not one was exempt; but as each passed from the boat thon was searched for dutiable articles that might be concealed about thons person.

"Each shall speak for himself or herself; and no one shall be condemned but by the verdict of a jury of his or her peers." Better: Each shall speak for thonself; and no one shall be condemned but by the verdict of a jury of thons peers.

"Any person making himself or herself obnoxious by loud talking or other noise, shall forfeit his or her rights to the reading room, and shall be excluded from its privileges till he or she has paid ten cents to the treasurer." Improve this thus: Any person making thonself obnoxious by loud talking or other noise shall forfeit thons rights to the reading room, and shall be excluded from its privileges till thon has paid ten cents to the treasurer.

"Any scholar violating this rule shall forfeit his or her scholarship." Any scholar violating this rule shall forfeit thons scholarship.

"Two things shall be essential to membership in this society: 1. His or her name shall appear by his or her own signature in the roll of members; 2. He or she shall pay to the treasurer one dollar." Two things shall be essential to membership in this society: 1. Thons name shall appear by thons own signature in the roll of members; 2. Thon shall pay to the treasurer one dollar."

#### ALBEMARLE TECHNIC SCHOOL.

Industrial schools are gradually becoming the great feature of the most approved training for our children. Perhaps one of the best for free instruction, with every facility the most liberal endowment can give, is the Miller Manual Labor School of Albemarle, at Crozet, Va. The only drawback is that the applicant must be poor or an orphan, and at the time of applying he must live in Albemarle Co. If by any means these conditions can be met by a boy or a girl, there is a chance for the most thorough education from the first elements through all branches of a general education to proficiency in almost any science, art, or trade. Horace Greeley used to say "Go West, young man." We would say, if you are fortunate enough to be poor, or an orphan, Go to Albemarle Co., Va., and gain a residence there; then enter this school and be what you will to be. A man who was once poor himself gave \$100,000 to found the Lynchburg Orphan Asylum, and when he died, he left to found this industrial school enough if in silver dollars to reach twenty-three miles, though every dollar should touch each other. Hold on there, my boy, don't go down there till you can tell how much money this would be.

## TOBACCO.

"I have found that those who use the weed get used to artificial teeth in about one-half the time that it takes those who do not use it. What is the experience of others in this direction?"—SUBSCRIBER.

Thanks be to God and good parents, *we* have had no "experience in this direction;" even our observation has been limited. Nearly all for whom *we* have made teeth, especially the women, have never chewed tobacco. We think this is the observation of all dentists. It is such a filthy habit, we are glad this is so. There is only one animal, —besides a few singularly indiscrete men,—who can be induced to chew tobacco; that is the repulsive African rock goat, and he lives a solitary life.

Of all who apply for artificial teeth, our correspondent will not find one in fifty chewing tobacco,—too small a proportion to be a basis for comparison; and this one will be of a class that gives the dentist the most trouble—the men. Women, who are too clean, and pure, and refined, and sensible to chew tobacco, become used to artificial teeth sooner than men. We would hardly advise our sisters, and wives, and mothers to chew tobacco to facilitate the process. And yet if it is so useful for the men, why not for the women? What is good for the gander, why is it not good for the goose?

We do remember making a set of teeth for a tobacco chewer once; and of all the filthy plates we ever did see was that one, when, after a few weeks' wear, he took it out of his mouth "to get fixt." With the assistance of a rag, we did pick it up, and, by holding our breath, we managed to carry it to the hydrant; but the good Lord deliver us from another such a mess!

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**Dark Joints** are caused either by poorly fitting joints or by over pressure in bringing the flask together. Some do not make their vents sufficiently free for superfluous rubber; they are in too much of a hurry in forcing the flask together. A preventive that is generally sufficient, is to press into the joints a little oxyphosphate. But even this will not overcome bad work. Let us do everything neatly, carefully, and skilfully, and a great many faults will disappear.

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**An Apology.**—Last month, in our article, *What a Shame*, we spoke of one of the incidents as having taken place at Niagara. This was a mistake. We should have said—well never mind, now; for it to have occurred anywhere was bad enough.

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**Oral Teeth.**—A gentleman wishes to know if the use of this term is in good taste. We answer, yes. Oral teeth are those specially modifying the voice, and include the incisors and cuspids.

**A New Primary Electric Battery** has been devised which is so easily managed as to be fit to put into the hands of servants, and is said to be capable of furnishing light for a house at a cost equivalent to about \$2 per thousand feet of gas. This will be a great convenience in country houses where oil must now be used. The slight extra cost would not be an objection to the people likely to employ such apparatus. The new battery is the invention of Mr. Upward, and depends on the consumption of zinc by chlorine.

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**Practical Instruction about the Teeth**, by Dr. A. Holbrook, Milwaukee, is a nice little book for the non-professional reader. Every dentist should have on his office table some treatise of this kind for his patients and their accompanying friends. It will pay him to have enough to distribute among them gratuitously or at a small cost. We have never seen any kind of advertisement that did better.

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**The Transactions of the American Dental Association** is just at hand. It makes quite a volume, though of course, much is of details mainly interesting to members. We do not think it was a brilliant session. We have already given a pretty good condensed report; there is much in these *Transactions*, however, which we shall take pleasure in using.

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*The Archives of Gynecology, Obstetrics and Pædiatrics.* New York. Series of 1886 just completed has met with such warm encouragement, the publishers have decided to issue monthly, and commencing January, the parts will so appear, instead of bi-monthly as heretofore.

LEONARD & Co.

141 Broadway, New York.

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*The Dental Office and Laboratory* appeared last month as a pamphlet of 24 pages, to be issued quarterly as in its previous newspaper form. The editor reminds us, however, this is "only for the present."

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**The Eastern Illinois Dental Society** was organized at Danville lately. This embraces the sixteen eastern counties of the State. Next meeting at Paris, the third Tuesday in March.

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**Reflecting Mouth Mirror.**—Dr. D. Genese, of Baltimore, has just received a patent for a combined speculum and double reflecting mouth mirror and duct compressor.

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*The Dental Advertiser*, of Philadelphia, ceased with the December number.

## *Miscellaneous.*

### THE BEE'S STING A USEFUL TOOL.

A new champion has arisen to defend the honey bee from the obloquy under which it has always rested. Mr. Wm. F. Clarke, of Canada, claims to have discovered from repeated observations, that the most important function of the bee's sting is not stinging. In a recent article he says:

My observations and reflections have convinced me that the most important office of the bee sting is that which is performed in doing the artistic cell work, capping the comb, and infusing the formic acid by means of which honey receives its keeping qualities. The sting is really a skilfully contrived little trowel, with which the bee finishes off and caps the cells when they are filled brimful of honey. This explains why honey extracted before it is capped over does not keep well. The formic acid has not been injected. This is done in the act of putting the last touches on the cell work. As the little pliant trowel is worked to and fro with such dexterity, the darts, of which there are two, pierce the plastic cell surface and leave the nectar beneath its tiny drops of the fluid which makes it keep well. This is the "art preservative" of honey. A most wonderful provision of nature, truly! Herein we see that the sting and the poison bag, with which so many of us would like to dispense, are essential to the storage of our coveted product, and that without them the beautiful comb honey of commerce would be a thing unknown.

If these things are so, how mistaken those people are who suppose that a bee is, like the Prince of Evil, always going about prowling in search of a victim. The fact is, the bee attends to its own business very diligently, and has no time to waste in unnecessary quarrels. A bee is like a farmer working with a fork in his hay field. He is fully occupied and busy. If molested or meddled with he will be very apt to defend himself with the implement he is working with. This is what the bee does; and man, by means of his knowledge of the nature and habits of this wondrous little insect, is enabled, in most cases, to ward off or evade attack. It is proof of their natural quietness, industry and peaceableness that so many thousands of them will go through a summer of ceaseless activity close to your dwelling house, and perhaps not half a dozen stings be inflicted during a whole season.

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**A Beautiful Polish.**—Three parts of shellac, one part of gum mastic, and one part of sandarac gum are dissolved together in forty parts of alcohol. It forms a beautiful polish, which may be applied with a brush or cloth.

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**Manderson's Crystal Cleaner**, is said by Dr. Sibley, of Canal Winchester, Ohio, to be excellent "for cleaning wash bowls, goblets, windows, painted woodwork, etc. It will clean and brighten all kinds of metal splendidly. It is specially good in the laboratory for cleaning soiled hands, etc. By using it with oil it is nice for cleaning furniture. It can be found at the groceries at 25 cents a pound."

## GRAPE JUICE CURE.

The grape cure is an old story in Europe. Recent analysis shows a close analogy between grape juice and human milk, as the following :

	HUMAN MILK.	GRAPE JUICE.
Albuminous substances,	1.5	1.7
Sugar, gum, etc.,	11.0	16.0
Mineral substances,	0.4	1.7
Water,	87.0	80.0

Grape juice is claimed to be a perfect food, a nutritive tonic, a nervous stimulant and a mild aphrodisiac. It is highly recommended for debility, scrofula, diseases of the liver and spleen, catarrh of the air passages, kidney disease, gravel, gout, etc.—*Drug. Circular.*

[We have found the grape cure an efficient remedy for plethoric states generally, with or without gout or portal congestion. But the caution of Niemeyer is most important; the grapes must be eaten as the only food. Otherwise patients eat their full meals, and then stow away a lot of grapes, under the notion that they are "good for them." The result is an apoplexy instead of a cure. As many grapes may be eaten as the appetite demands; a small piece of stale bread being taken at each meal, but no other food.—ED.]

A *double* purpose may be accomplished by covering the rafters and stones of the cellar with whitewash made yellow with copperas, and filling the crevices and cracks of the floor with dry copperas. The rats and mice will immediately vacate the cellar so treated, and it will be thoroughly purified and disinfected.

The Mayor of Charleston has received from an Englishman some recommendations as to the mortar that should be used in rebuilding in that city, asserting that the addition of saccharine matter, such as molasses, infusion of malt, etc., to the mortar increases its strength to an extraordinary degree. The hardness of the old Roman cement, which is equal to the stone it binds together, is believed to be due to the addition of saccharine matter. Water to which sugar has been added will dissolve 14½ times as much lime as pure water. Recent experiments with sweetened mortar have proved that walls may be built so strong that they cannot be torn down with anything but explosives.

**Chapped Hands.**—The easiest and simplest remedy is found in every store-room. Take common starch and grind it to a powder. Every time the hands are dampened, wipe them, and rub the starch thoroughly over them. The effect is magical.—*Health Record.*

**Italian Cabinet Work,** unexcelled for finish, is first saturated with olive oil, after which a solution of gum arabic in alcohol is applied. This mode of varnishing is equally brilliant to the French.

**For Bee Stings.**—Oil Cinnamon is remarkably efficient. As it sometimes blisters the flesh, apply but a very small amount just at the point of the sting by the use of a finely pointed stick.